

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

**Table VII - A**  
**Applicable Limits and Compliance Monitoring Requirements**

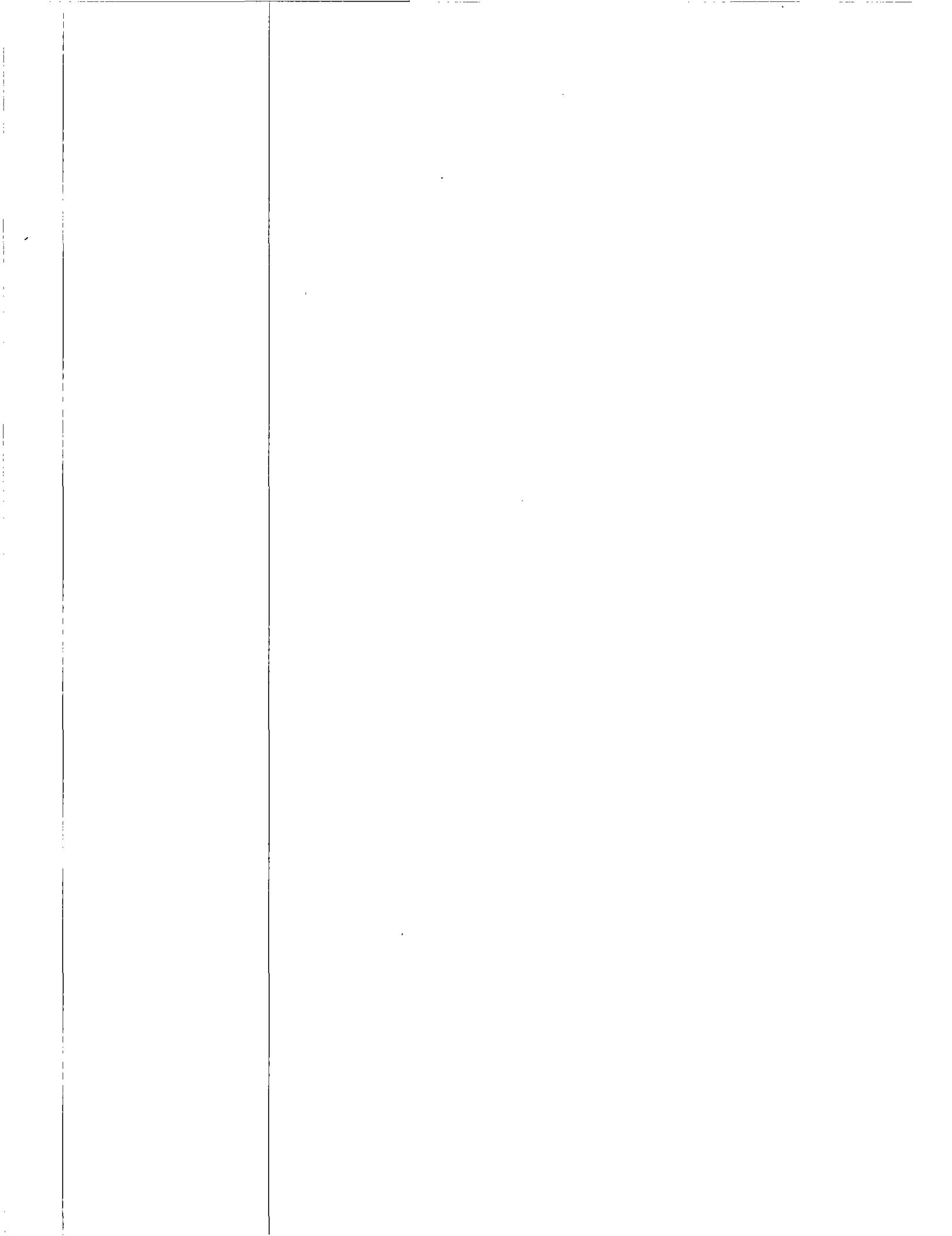
**S-1, GAS TURBINE #1**

**S-2, GAS TURBINE #2**

<b>Type of Limit</b>	<b>Citation of Limit</b>	<b>FE Y/N</b>	<b>Limit</b>	<b>Monitoring Requirement Citation</b>	<b>Monitoring Frequency (P/C/N)</b>	<b>Monitoring Type</b>	<b>Compliance</b>	
							<b>Yes</b>	<b>No</b>
NOx	BAAQMD 9-3-303	N	125 ppm	BAAQMD 1-520.1	C	CEM	X	
NOx	BAAQMD 9-9-301.1.3	N	9 ppmv @ 15% O <sub>2</sub> , dry	BAAQMD 9-9-501	C	CEM	X	
NOx	SIP 9-9-301.3	Y	9 ppmv @ 15% O <sub>2</sub> , dry	SIP 9-9-501	C	CEM	X	
NOx	BAAQMD 9-9-301.2	N	0.15 LB/MMBTU or 5 ppmv	BAAQMD 9-9-501	C	CEM	X	
NOx	NSPS, 40 CFR 60.332 (a)(1)	Y	75 ppmv @ 15% O <sub>2</sub> , dry, 4-hour rolling average	NSPS 40 CFR 60.334(c.)	C	CEM	X	
		Y	None	40 CFR 75.10	C	CEM	X	
NOx	BAAQMD condition #18310, part 20a	Y	19.2 lb/hr for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 20a	Y	19.2 lb/hr for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load	X	
NOx	BAAQMD condition #18310, part 20a	Y	0.00904 lb/MM BTU for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 20a	Y	0.00904 lb/MM BTU for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load	X	

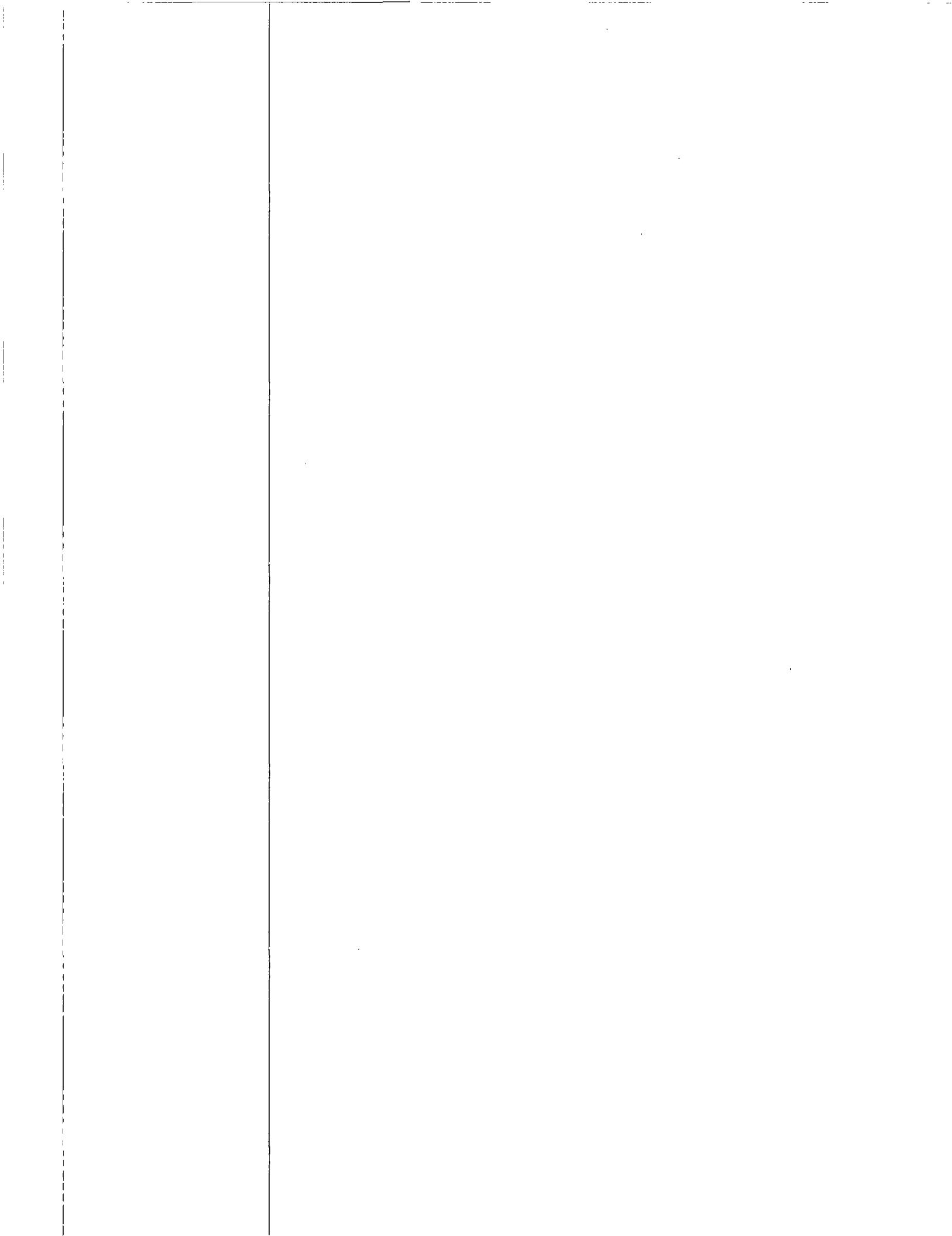
**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
NOx	BAAQMD condition #18310, part 20b	Y	2.5 ppmv, @ 15% O <sub>2</sub> , dry, for each turbine/HRSG powertrain, 1-hr average except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load	X	
NOx	BAAQMD condition #18310, part 20b	Y	2.5 ppmv, @ 15% O <sub>2</sub> , dry, for each turbine/HRSG powertrain, 1-hr average except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 21	Y	240 lb/gas turbine start-up	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 21	Y	480 lb/hr during gas turbine cold start-up or combustor tuning period	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 21	Y	80 lb/gas turbine shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 24a	Y	1362.6 lb/day for S-1, S-3 Gas Turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 25a	Y	123.4 ton/yr for S-1, S-3 Gas Turbines and S-2, S-4 HRSGs, combined (including emissions from commissioning period)	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 20c	Y	18.7 lb/hr, for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load and minimum load	X	
CO	BAAQMD condition #18310, part 20c	Y	18.7 lb/hr, for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	



**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
CO	BAAQMD condition #18310, part 20d	Y	0.0088 lb/MM BTU for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load and minimum load	X	
CO	BAAQMD condition #18310, part 20d	Y	0.0088 lb/MM BTU for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 20d	Y	4 ppmv @ 15% O <sub>2</sub> , dry, for each turbine/HRSG powertrain, 3-hr average, except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load and minimum load	X	
CO	BAAQMD condition #18310, part 20d	Y	4 ppmv @ 15% O <sub>2</sub> , dry, for each turbine/HRSG powertrain, 3-hr average, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 20d	Y	4 ppmv @ 15% O <sub>2</sub> , dry, for each turbine/HRSG powertrain, 3-hr average, except during turbine startup and shutdown	40 CFR 64.3 (b)(4)(ii)	At least 4 times per hour (CAM Plan)	CEM	X	
CO	BAAQMD condition #18310, part 21	Y	2,514 lb/gas turbine startup	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 21	Y	5028 lb/hr during gas turbine cold start-up or combustor tuning period	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 21	Y	902 lb/gas turbine shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 24b	Y	7,891.1 lb/day for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, Part 27b	C	CEM	X	



**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
CO	BAAQMD condition #18310, part 25b	Y	588 ton/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO <sub>2</sub>		Y	None	40 CFR 75.10	C	fuel flow monitor and CO <sub>2</sub> calculation	X	
SO <sub>2</sub>	BAAQMD 9-1-301	Y	GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N		X	
SO <sub>2</sub>	BAAQMD 9-1-302	Y	300 ppm (dry)		N		X	
SO <sub>2</sub>	NSPS 40 CFR 60.333(a)	Y	0.015% (vol.) @ 15% O <sub>2</sub> (dry)	NSPS 40 CFR 60.334(h)	N		X	
SO <sub>2</sub>	NSPS 40 CFR 60.333(b)	Y	Total sulfur content of fuel not to exceed 0.8 percent by weight (8000 ppmw)	NSPS 40 CFR 60.334(h)(3)(i) and BAAQMD condition #18310, Part 45	P/M	Fuel sulfur content testing	X	
SO <sub>2</sub>		Y	None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3	P/A	Fuel measurements, calculations	X	
SO <sub>2</sub>	BAAQMD condition #18310, part 20g	Y	1.28 lb/hr, for each turbine/HRSH powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
SO <sub>2</sub>	BAAQMD condition #18310, part 20g	Y	1.28 lb/hr, for each turbine/HRSH powertrain	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
SO2	BAAQMD condition #18310, part 20g	Y	0.0006lb/MM BTU, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
SO2	BAAQMD condition #18310, part 20g	Y	0.0006lb/MM BTU, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
SO2	BAAQMD condition #18310, part 24e	Y	57.9 lb/day for each turbine/HRSG powertrain	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
SO2	BAAQMD condition #18310, part 25e	Y	10.6 ton /yr for each turbine/HRSG powertrain (includes emissions from commissioning period)	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
Opacity	BAAQMD 6-1-301	N	> Ringelmann No. 1 for no more than 3 minutes in any hour		N		X	
Opacity	SIP 6-301	Y	> Ringelmann No. 1 for no more than 3 minutes in any hour		N		X	
FP	BAAQMD 6-1-310.3	N	0.15 grain/dscf @ 6% O2		N		X	
FP	SIP 6-310.3	Y	0.15 grain/dscf @ 6% O2		N		X	
PM <sub>10</sub>	BAAQMD condition #18310, part 20h	Y	9 lb/hr, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
PM <sub>10</sub>	BAAQMD condition #18310, part 20h	Y	0.00452 lb/MM BTU, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
PM <sub>10</sub>	BAAQMD condition #18310, part 24d	Y	510 lb/day for S-1, S-3 Gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
PM <sub>10</sub>	BAAQMD condition #18310, part 25d	Y	83.34 ton/yr for S-1, S-3 Gas turbines and S-2, S-4 HRSGs, combined (including emissions from commissioning period)	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
POC	BAAQMD condition #18310, part 20f	Y	2.7 lb/hr (as CH4) for each turbine/HRSG powertrain except during turbine startup and shut down	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
POC	BAAQMD condition #18310, part 20f	Y	0.00126 lb/MM BTU (as CH4) for each turbine/HRSG powertrain except during turbine startup and shut down	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
POC	BAAQMD condition #18310, part 21	Y	48 lb/gas turbine startup	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
POC	BAAQMD condition #18310, part 21	Y	16 lb/gas turbine shutdown	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
POC	BAAQMD condition #18310, part 21	Y	96 lb/hr during gas turbine cold start up or combustor tuning period	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
POC	BAAQMD condition #18310, part 24c	Y	230.2 lb/day (as CH4) for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
POC	BAAQMD condition #18310, part 25c	Y	28 ton/yr } for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined (including emissions from commissioning period)	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
NH <sub>3</sub>	BAAQMD condition #18310, part 20e	N	5 ppmv, @ 15% O <sub>2</sub> dry, averaged over 3 hrs for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, part 27c	C	Ammonia injection rate monitor	X	
Formaldehyde	BAAQMD condition #18310, part 26a	N	3796 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 29	P/D	Records, calculations	X	
Formaldehyde	BAAQMD condition #18310, part 26a	N	3796 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 33	P/every two years on P-1 or P-2	Source Test	X	
Benzene	BAAQMD condition #18310, part 26b	N	480 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 29	P/D	Records, calculations	X	
Benzene	BAAQMD condition #18310, part 26b	N	480 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 33	P/every two years on P-1 or P-2	Source Test	X	
Specific PAH Compounds	BAAQMD condition #18310, part 26c	N	22.8 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 29	P/D	Records, calculations	X	
Specific PAH Compounds	BAAQMD condition #18310, part 26c	N	22.8 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 33	P/every two years on P-1 or P-2	Source Test	X	
Heat input limit	BAAQMD condition #18310, part 14	Y	2,124 MM BTU/hr (HHV), 3-hr average for each turbine/HRSG powertrain	BAAQMD condition #18310, part 27a	C	Fuel meter, firing monitor, calculations	X	
Heat input limit	BAAQMD condition #18310, part 15	Y	49,908 MM BTU/calender day (HHV), for each turbine/HRSG powertrain	BAAQMD condition #18310, part 27a	C	Fuel meter, firing monitor, calculations	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
Heat input limit	BAAQMD condition #18310, part 16	Y	35,274,060 MM BTU/yr (HHV) for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 27a	C	Fuel meter, firing monitor, calculations	X	
Cold Start-Up, Combustor Tuning Firing Limit	BAAQMD condition #18310, part 48	Y	30 firing hours per year for S-1 and S-3 gas turbines, combined for purposes of cold start-up or combustor tuning	BAAQMD condition #18310, part 49	P/E	Recordkeeping	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**

**S-3, HEAT RECOVERY STEAM GENERATOR #1**

**S-4, HEAT RECOVERY STEAM GENERATOR #2**

<b>Type of Limit</b>	<b>Citation of Limit</b>	<b>FE Y/N</b>	<b>Limit</b>	<b>Monitoring Requirement Citation</b>	<b>Monitoring Frequency (P/C/N)</b>	<b>Monitoring Type</b>	<b>Compliance</b>	
							<b>Yes</b>	<b>No</b>
NOx	BAAQMD 9-9-301.3	N	9 ppmv @ 15% O <sub>2</sub> , dry	BAAQMD 9-9-501	C	CEM	X	
NOx	SIP 9-9-301.3	Y	9 ppmv @ 15% O <sub>2</sub> , dry	SIP 9-9-501	C	CEM	X	
NOx	BAAQMD 9-9-301.2	N	0.15 LB/MMBTU or 5 ppmv	BAAQMD 9-9-501	C	CEM	X	
NOx	NSPS, 40 CFR 60.44b (a)(4)(i)	Y	0.2 lb/ MM BTU except, during start-up, shutdown or malfunction	NSPS 40 CFR 60.48b (b)(2) and BAAQMD Condition #18310, part 27b	C	CEM	X	
NOx	NSPS, 40 CFR 60.332 (a)(1)	Y	75 ppmv @ 15% O <sub>2</sub> , dry, 4-hour rolling average	NSPS 40 CFR 60.334(c) and BAAQMD Condition #18310, part 27b	C	CEM	X	
NOx		Y	None	40 CFR 75.10	C	CEM	X	
NOx	BAAQMD condition #18310, part 20a	Y	19.2 lb/hr for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 20a	Y	19.2 lb/hr for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load	X	
NOx	BAAQMD condition #18310, part 20a	Y	0.00904 lb/MM BTU for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 20a	Y	0.00904 lb/MM BTU for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
NOx	BAAQMD condition #18310, part 20b	Y	2.5 ppmv, @ 15% O <sub>2</sub> , dry, for each turbine/HRSG powertrain, 1-hr average except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load	X	
NOx	BAAQMD condition #18310, part 20b	Y	2.5 ppmv, @ 15% O <sub>2</sub> , dry, for each turbine/HRSG powertrain, 1-hr average except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 24a	Y	1362.6 lb/day for S-1, S-3 Gas Turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, Part 27b	C	CEM	X	
NOx	BAAQMD condition #18310, part 25a	Y	123.4 ton/yr for S-1, S-3 Gas Turbines and S-2, S-4 HRSGs, combined (including emissions from commissioning period)	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 20c	Y	18.7 lb/hr, for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load and minimum load	X	
CO	BAAQMD condition #18310, part 20c	Y	18.7 lb/hr, for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 20d	Y	0.0088 lb/MM BTU for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load and minimum load	X	
CO	BAAQMD condition #18310, part 20d	Y	0.0088 lb/MM BTU for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part	Y	4 ppmv @ 15% O <sub>2</sub> , dry, for each turbine/HRSG powertrain, 3-hr average,	BAAQMD condition #18310, Part 31	P/A	Source Test at maximum load and	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
	20d		except during turbine startup and shutdown			minimum load		
CO	BAAQMD condition #18310, part 20d	Y	4 ppmv @ 15% O <sub>2</sub> , dry, for each turbine/HRSG powertrain, 3-hr average, except during turbine startup and shutdown	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 24b	Y	7,891.1 lb/day for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO	BAAQMD condition #18310, part 25b	Y	588 ton/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #18310, Part 27b	C	CEM	X	
CO <sub>2</sub>		Y	None	40 CFR 75.10	C	fuel flow monitor and CO <sub>2</sub> calculation	X	
SO <sub>2</sub>	BAAQMD 9-1-301	Y	GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N		X	
SO <sub>2</sub>	BAAQMD 9-1-302	Y	300 ppm (dry)		N		X	
SO <sub>2</sub>	NSPS 40 CFR 60.333(a)	Y	0.015% (vol.) @ 15% O <sub>2</sub> (dry)	NSPS 40 CFR 60.334(h)	N		X	
SO <sub>2</sub>	NSPS 40 CFR 60.333(b)	Y	Total sulfur content of fuel not to exceed 0.8 percent by weight (8000 ppmw)	NSPS 40 CFR 60.334(h)(3)(ii) and BAAQMD condition #18310, Part 45	P/M	Fuel sulfur content testing	X	
SO <sub>2</sub>		Y	None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3	P/A	Fuel measurements, calculations	X	
SO <sub>2</sub>	BAAQMD condition #18310, part	Y	1.28 lb/hr, for each turbine/HRSH powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
	20g							
SO2	BAAQMD condition #18310, part 20g	Y	1.28 lb/hr, for each turbine/HRSH powertrain	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
SO2	BAAQMD condition #18310, part 20g	Y	0.0006lb/MM BTU, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
SO2	BAAQMD condition #18310, part 20g	Y	0.0006lb/MM BTU, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
SO2	BAAQMD condition #18310, part 24e	Y	57.9 lb/day for each turbine/HRSG powertrain	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
SO2	BAAQMD condition #18310, part 25e	Y	10.6 ton /yr for each turbine/HRSG powertrain (includes emissions from commissioning period)	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
Opacity	BAAQMD 6-1-301	N	> Ringelmann No. 1 for no more than 3 minutes in any hour		N		X	
Opacity	SIP 6-301	Y	> Ringelmann No. 1 for no more than 3 minutes in any hour		N		X	
FP	BAAQMD 6-1-310.3	N	0.15 grain/dscf @ 6% O2		N		X	
FP	SIP 6-310.3	Y	0.15 grain/dscf @ 6% O2		N		X	
PM	NSPS 40 CFR 60.42a (b)	Y	< 20% opacity, 6 minute average, except one six minute period/hr up to 27% opacity		N		X	
PM <sub>10</sub>	BAAQMD condition #18310, part	Y	9 lb/hr, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
	20h							
PM <sub>10</sub>	BAAQMD condition #18310, part 20h	Y	0.00452 lb/MM BTU, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
PM <sub>10</sub>	BAAQMD condition #18310, part 24d	Y	510 lb/day for S-1, S-3 Gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 24	P/D	Records, calculations	X	
PM <sub>10</sub>	BAAQMD condition #18310, part 25d	Y	83.34 ton/yr for S-1, S-3 Gas turbines and S-2, S-4 HRSGs, combined (including emissions from commissioning period)	BAAQMD condition #18310, part 25	P/D	Records, calculations	X	
POC	BAAQMD condition #18310, part 20f	Y	2.7 lb/hr (as CH <sub>4</sub> ) for each turbine/HRSG powertrain except during turbine startup and shut down	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
POC	BAAQMD condition #18310, part 20f	Y	0.00126 lb/MM BTU (as CH <sub>4</sub> ) for each turbine/HRSG powertrain except during turbine startup and shut down	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	X	
POC	BAAQMD condition #18310, part 24c	Y	230.2 lb/day (as CH <sub>4</sub> ) for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
POC	BAAQMD condition #18310, part 25c	Y	28 ton/yr ) for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined (including emissions from commissioning period)	BAAQMD condition #18310, part 28	P/D	Records, calculations	X	
NH <sub>3</sub>	BAAQMD condition #18310, part 20e	N	5 ppmv, @ 15% O <sub>2</sub> dry, averaged over 3 hrs for each turbine/HRSG powertrain, except during turbine startup and shutdown	BAAQMD condition #18310, part 27c	C	Ammonia injection rate monitor	X	
Formaldehyde	BAAQMD condition #18310, part 26a	N	3796 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 29	P/D	Records, calculations	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
Formaldehyde	BAAQMD condition #18310, part 26a	N	3796 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 33	P/every two years on P-1 or P-2	Source Test	X	
Benzene	BAAQMD condition #18310, part 26b	N	480 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 29	P/D	Records, calculations	X	
Benzene	BAAQMD condition #18310, part 26b	N	480 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 33	P/every two years on P-1 or P-2	Source Test	X	
Specific PAH Compounds	BAAQMD condition #18310, part 26c	N	22.8 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 29	P/D	Records, calculations	X	
Specific PAH Compounds	BAAQMD condition #18310, part 26c	N	22.8 lb/yr for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 33	P/every two years on P-1 or P-2	Source Test	X	
Heat input limit	BAAQMD condition #18310, part 14	Y	2,124 MM BTU/hr (HHV), 3-hr average for each turbine/HRSG powertrain	BAAQMD condition #18310, part 27a	C	Fuel meter, firing monitor, calculations	X	
Heat input limit	BAAQMD condition #18310, part 15	Y	49,908 MM BTU/calendar day (HHV), for each turbine/HRSG powertrain	BAAQMD condition #18310, part 27a	C	Fuel meter, firing monitor, calculations	X	
Heat input limit	BAAQMD condition #18310, part 16	Y	35,274,060 MM BTU/yr (HHV) for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 27a	C	Fuel meter, firing monitor, calculations	X	
Prohibited firing	BAAQMD condition #18310, part 17	Y	Each HRSG duct burner may not be fired unless its associated gas turbine is being fired	BAAQMD condition #18310, part 27a	C	Fuel meter, firing monitor, calculations	X	



**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5 COOLING TOWER**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
Opacity	BAAQMD 6-1-301	N	>Ringelmann No.1 for no more than 3 minutes in any hour		N		X	
FP	BAAQMD 6-1-310	N	0.15 gr/dscf		N		X	
Opacity	SIP 6-301	Y	>Ringelmann No.1 for no more than 3 minutes in any hour		N		X	
FP	SIP 6-310	Y	0.15 gr/dscf		N		X	
Drift Rate	BAAQMD Condition #18310, part 46	Y	0.0005%	BAAQMD Condition #18310, part 46	P	Initial Source Test	X	
Total Dissolved Solids	BAAQMD Condition #18310, part 46	Y	5438 ppmw (mg/l)	BAAQMD Condition #18310, part 46	P/D	Sampling and Testing of cooling tower water	X	

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

**Table VII – D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6 STATIONARY STANDBY GENERATOR SET**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
Opacity	BAAQMD 6-1-301	N	>Ringelmann No.1 for no more than 3 minutes in any hour		N		SOURCE NOT COMMISSIONED	
Opacity	SIP 6-301	Y	>Ringelmann No.1 for no more than 3 minutes in any hour		N			
FP	BAAQMD 6-1-310.3	N	0.15 gr/dscf @ 6% O2		N			
FP	SIP 6-310.3	Y	0.15 gr/dscf @ 6% O2		N			
SO <sub>2</sub>	BAAQMD 9-1-301	Y	GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N			
SO <sub>2</sub>	BAAQMD 9-1-302	Y	300 ppm (dry)		N			
Heat Input Limit	BAAQMD Condition #22231 part 1	Y	14.1 MM BTU/hr		N			
Reliability Related activities	BAAQMD Condition #22231 part 2	Y	100 hours per calendar year	BAAQMD Condition #22231 part 6	P/E	Recordkeeping		
NOx, CO and POC	BAAQMD Condition #22231 part 3	Y	1.0 g NOx/bhp-hr 2.75 g CO/bhp-hr 1.0 g POC/bhp-hr		N			

**Metcalf Energy Center**  
**Title V CEMS Semi-Annual Monitoring Report**  
**July 1, 2015 – December 31, 2015**

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-7 FIRE PUMP DIESEL ENGINE**

Type of Limit	Citation of Limit	FE Y/N	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
							Yes	No
Opacity	BAAQMD 6-1-301	N	>Ringelmann No.2 for no more than 3 minutes in any hour		N		X	
Opacity	SIP 6-301	Y	>Ringelmann No.2 for no more than 3 minutes in any hour		N		X	
FP	BAAQMD 6-1-310.3	N	0.15 gr/dscf @ 6% O <sub>2</sub>		N		X	
FP	SIP 6-310.3	Y	0.15 gr/dscf @ 6% O <sub>2</sub>		N		X	
SO <sub>2</sub>	BAAQMD 9-1-301	Y	GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N		X	
Fuel Sulfur Content	BAAQMD 9-1-304	Y	Sulfur Content ≤ 0.5% by weight		N		X	
SO <sub>2</sub>	BAAQMD Condition #19610, part 39	N	Sulfur content of fuel less than 0.05% by weight	BAAQMD Condition #19610, part 39	P/E		X	
Reliability Related activities	BAAQMD Condition #21917 part 1	Y	30 hours per calendar year	BAAQMD Condition #21917 part 2, 3	P/E	Totalizing Meter, record keeping	X	